In The Claims:

- 1. Cancelled.
- 2. Cancelled.
- 3. Cancelled.
- 4. Cancelled.
- 5. Cancelled.
- 6. Cancelled.
- 7. Cancelled.
- 8. Cancelled.
- 9. Cancelled.
- 10. Cancelled.
- 11. Cancelled.
- 12. A system for forming an injection molded plastic part in a mold comprising:

a mold, said mold having a part-forming mold cavity therein;

sealing members for sealing said mold cavity and preventing gas leakage therefrom;

a first gas source for supplying a gas into the mold cavity to prepressurize the mold cavity to a first pre-determined value;

a vent valve for removing said gas from the mold cavity as desired;

a gas control mechanism for maintaining the gas pressure in the mold cavity at a second pre-determined value;

a source for injecting molten plastic material into the mold cavity;

a gas pin assembly for supplying gas into the plastic material in the mold cavity; and

a second gas source for supplying gas to said gas pin assembly.

13. The system as recited in claim 12 further comprising:

at least one ejector pin assembly for ejecting the completed plastic part from the mold cavity.

- 14. The system as recited in claim 12 wherein said first and second gas source are the same source.
- 15. The system as recited in claim 12 wherein said gas control mechanism comprises an infinitely adjustable gas control valve.